

Mathematics Engineering Science Achievement School District/Charter School Grant Application (2009-2012)

Deadline for Applications: June 12, 2009

Utah State Education Representative: Jeffrey Ojeda MESA State Wide Coordinator (801) 538-7945



Utah State Office of Education 250 East 500 South P.O. Box 144200 Salt Lake City, Utah 84114-4200

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INTRODUCTION

Utah MESA is a member of MESA USA, a partnership of MESA programs from several states. The program is based on a common academic enrichment model that supports students so they excel in math and science. MESA USA serves as an arena for the programs to share best practices and to continually refine and improve the MESA model. The organization also seeks to establish new programs to reach more students who need MESA's services.

OBJECTIVES

The Utah MESA program objectives are:

- 1. To increase the number of underserved ethnic minority and female students who pursue coursework, advanced study and possible careers in mathematics, engineering, and science-based areas.
- 2. To provide a program and activities designed to motivate underserved ethnic minority and female students to take better advantage of all existing educational opportunities.
- 3. To facilitate an increase in high school graduation rates of MESA-involved students.
- 4. To strengthen the confidence of underserved ethnic minority and female students relating to their success in mathematics and science courses, and to provide them with skills and opportunities to become successful role models for other students.
- 5. To provide underserved ethnic minority and female students the opportunity to relate and associate with successful role models.
- 6. To coordinate the efforts of public schools, colleges and universities, the USOE, industries, professional and community groups, and others in the development and maintenance of academic support programs. These programs are designed to increase the participation of underserved ethnic minority and all female students in academic and career pursuits in mathematics and science.
- 7. To provide more information about MESA opportunities and participation criteria to parents of minority students and to actively involve minority students' parents in school activities and programs.

Authorizing Legislation R277-717 (1-6):

- R277-717-1. Definitions.
- R277-717-2. Authority and Purpose.
- R277-717-3. Proposal Criteria.
- R277-717-4. Budget.
- R277-717-5. Board Funding Priorities.
- R277-717-6. Proposal Applications and Timeline.

R277-717-1. Definitions.

- A. "Annual report" means information and data identified under R277-717-3E provided by funding recipients to the Utah State Office of Education by June 30 of each year as a requirement for continued funding of the school or school district program.
- B. "Board" means the Utah State Board of Education.
- C. "Mathematics, Engineering, Science Achievement (MESA)" program means a course or courses offered during the regular school day or a club or activities held after school that involves identified students and addresses identified school district/charter school objectives with underserved ethnic minority and all female students consistent with funding purposes and the purposes of this rule. MESA programs, activities, and courses or classes may be offered at all grade levels. Programs should be coordinated among secondary schools/charter schools and their feeder schools.
- D. "MESA Public Education Funding Application Review Committee (Committee)" means a funding advisory committee to the Board composed of nine members as follows: four Coalition of Minorities Advisory Committee (CMAC) representatives who are not employed by applicant districts, three school districts/charter schools representatives, including only representatives of districts that are not applying for MESA funding during the current grant cycle, two higher education representatives with expertise in mathematics, engineering, science or technology. USOE staff shall facilitate the funding application review process but shall not vote in any Committee decisions.
- E. "Minority Students" means African American students, Asian students, American Indian students, Alaskan Native students, Native Hawaiian students, Hispanic students, Latino students, Pacific Islander students or other underserved ethnic minority students as proposed by the applicant.
- F. "School District/Charter School or School Proposal" means a written proposal, including budget and evaluation components, developed by each school district/charter school applying for MESA funding or, if so determined by the district, by each recipient school.
- G. "USOE" means the Utah State Office of Education.

R277-717-2. Authority and Purpose.

- A. This rule is authorized by Utah Constitution, Article X, Section 3, which vests general control and supervision of public education in the Board, Section 53A-4-205 which assigns to the Board the responsibility for developing standards and administering funds for programs promoting educational excellence, Section 53A-1-401(3) which permits the Board to adopt rules in accordance with its responsibilities, and Section 53A-17a-121 which appropriates funding for programs for at-risk youth. The USOE shall provide statewide supervision of the program and budget and shall recommend funding for MESA programs based on MESA objectives and Board funding priorities.
- B. This rule establishes standards and procedures to direct recipient public school districts/traditional schools or charter schools to develop proposals that encourage the participation of underserved ethnic minority and all female students who traditionally have not participated in mathematics, engineering, and science classes and programs proportionately to white males.

R277-717-3. Proposal Criteria.

- A. School district/traditional school or charter school proposals shall identify objectives and activities to address MESA and Board objectives.
- B. The objectives of the MESA program are:
 - (1) to increase the number of underserved ethnic minority and all female students who pursue course work, advanced study and possible careers in mathematics, engineering, and science areas, including teaching of mathematics and science;
 - (2) to provide a program and activities designed to motivate underserved ethnic minority and all female students to take better advantage of all existing educational opportunities;
 - (3) to facilitate an increase in high school graduation rates of MESAinvolved students;
 - (4) to strengthen the confidence of underserved ethnic minority and all female students relating to their success in mathematics and science courses, and to provide them with skills and opportunities to become successful role models for other students:
 - (5) to provide underserved ethnic minority and all female students the opportunity to relate to and associate with successful role models;
 - (6) to coordinate the efforts of public schools, colleges and universities, the USOE, industries, professional and community groups, and others in

the development and maintenance of academic support programs to increase the participation of underserved ethnic minority and all female students in academic and career pursuits in mathematics and science; and

- (7) to provide more information about MESA opportunities and participation criteria to parents of minority students and to actively involve minority students' parents in school activities and programs.
- C. Courses shall include secondary courses that place underserved ethnic minority and all female students on a college preparation track for post high school opportunities in mathematics and science. MESA courses may include:
 - (1) CTE classes;
 - (2) community school classes;
 - (3) concurrent enrollment;
 - (4) advanced placement classes; or
 - (5) classes offered through higher education institutions.
- D. MESA activities may include:
 - (1) regularly scheduled after-school guest presenters;
 - (2) tutoring sessions, particularly in mathematics and science, including study aids;
 - (3) field trips;
 - (4) practical activities designed to introduce students to career possibilities, curriculum options or additional courses of study;
 - (5) meaningful experiences and opportunities to discuss career opportunities in mathematics, engineering, and science, including teaching in these fields as a potential career;
 - (6) academic service learning designed to address school interest and attendance issues as well as to introduce underserved ethnic minority and all female students to mathematics, engineering-related businesses/activities, science and opportunities for high school and post-secondary classes and the future;
 - (7) internships or work experiences in identified areas which may be encouraged by student stipends or academic credit or both;
 - (8) science fairs;

- (9) math competitions; and
- (10) extracurricular math/science activities.
- E. A school district or school/charter school proposal shall include a report of the previous year's courses and activities from the funding cycle.
 - (1) The proposal shall also include:
 - (a) a program narrative;
 - (b) a plan to coordinate program activities with MESA objectives;
 - (c) a projected budget; and
 - (d) an evaluation plan.
 - (2) The annual report shall include:
 - (a) an accounting of MESA funds spent in the previous year consistent with objectives identified in the proposal;
 - (b) descriptions and examples of materials or activities that encouraged participation of underserved ethnic minority and all female students in MESA-funded courses and activities;
 - (c) specific numbers or examples of increased participation or success in mathematics, science, engineering courses/activities by underserved ethnic minority and all female students;
 - (d) the number of ethnic minority teachers added to math/science departments;
 - (e) data on the course taking patterns of ethnic minority and female students;
 - (f) number of MESA participants who began college programs; and
 - (g) number of MESA participants who took the ACT/SAT exams.

R277-717-4. Budget.

- A. Proposed expenditures shall be specific to program objectives.
- B. The budget may include payments to compensate schools for school fees directly related to participation by underserved ethnic minority and all female students in identified MESA courses or activities.

C. School districts or schools are encouraged to consider additional and creative course alternatives for identified students.

R277-717-5. Board Funding Priorities.

The Board shall fund school district or school programs based on priorities and criteria including:

- A. programs that clearly address all MESA objectives;
- B. programs that provide matching funds from school districts or federal sources, or both;
- C. programs that show an increase in MESA participants over the previous year;
- D. increased participation of MESA students in college preparation classes;
- E. increased rate of graduation among MESA students;
- F. innovative and effective counseling and tutoring models; and
- G. total number of targeted students in the school district or school's population.

R277-717-6. Proposal Applications and Timeline.

- A. Proposals shall be submitted tri-annually beginning June 15, 2006 by school districts or schools/charter schools with approval of their governing board to the Committee no later than June 30 of each designated year together with the required program report(s).
- B. The USOE may request more information, additional data or budget information if annual reports or student assessments indicate that MESA funding is being used ineffectively, for ineligible students, or inconsistently with the school district/school/charter school plan or the intent of this rule.
- C. Proposals shall be submitted to the USOE on forms provided by the USOE and consistent with state and federal laws and USOE timelines.
- D. State funding may require matching funding from local or federal sources. Applications may require identification of matching funds.
- E. The Funding Committee may seek additional information from applicants and may assist applicants to align proposed expenditures with MESA objectives.
- F. The Funding Committee shall make final recommendations to the USOE no later than July 31.
- G. The USOE shall make recommendations to the Board for final approval of program funding.

Application Instructions

Complete the following steps:

- **STEP 1:** ___ Complete the Cover and Assurance Pages (pages 11-13). (1 pt)
- STEP 2: ___ Describe your proposed MESA program (page 14). (1 pt)
- STEP 3: ___ Summarize how your proposed program fits with the MESA objectives (page 15). (1 pt)
- STEP 4: ___ Describe the method of self-evaluation and monitoring strategies for your program (page 16). (1 pt)
- STEP 5: ___ Describe specific strategies that you will use to recruit and maintain MESA targeted students (page 17). (1 pt)
- STEP 6: ___ Complete the chart (page 18) that designates the number of minority teachers in math and sciences departments. What strategies will you implement in order to increase the number of minority teachers in those areas? (1 pt)
- **STEP 7:** ___ Complete the minority student population chart (page 18). (1 pt)
- STEP 8: ___ Complete the chart (page 18) showing the number of minority and female students enrolled in advanced placement, concurrent enrollment, honors and gifted courses. (1 pt)
- STEP 9: ___ Complete the MESA student graduation rate (page 19). (1 pt)
- **STEP 10:** ___ Describe what innovative and effective counseling models will be used in your MESA program (page 19). (1 pt)
- STEP 11: ___ Complete the budget form (page 20) detailing project expenditures. (1 pt)
- STEP 12: ___The completed application must be turned in on time or it will not be considered. (4 pts)

After completing the application:

- *Submit 1 original and 7 copies of the full proposal to USOE.
- *The original must include original signatures.
- *All entries must be postmarked. Fax and e-mails will **not** be accepted.
- *Applications are due by no later than June 12, 2009, at 5:00 PM.

Award Administration

1. Notification and award conditions:

The contact person named on each application will be notified of status of application within 30 days from MESA Funding Committee approval.

2. Reporting Requirements:

The eligible District/School or charter receiving the grant will be under the supervision of the Utah State office of Education, and will be required to make timely program progress reports. They are also required to submit to audit and evaluation requests as needed to aid with reporting to the State Legislature.

3. Grant proposals for the MESA program are protected under Utah Code r277-717 so long as the program is ongoing and competitive applications are accepted by the Utah State Office of Education.

Grant Application Cover Sheet



Due Date: (TBA) Submit original and 7 copies to: Jeffrey Ojeda, Minority Achievement Specialist 250 East 500 South/P.O. Box 144200 Salt Lake City, Utah 84114-4200

Application for MESA Grant Year 2009-2012

| Name of District/Charter School: |
|---|
| Name of District/Charter School MESA Grant Coordinator: |
| Address: |
| |
| Phone Number: |
| Fax: |
| Email: |
| Names of Schools that are a part of this application (attach additional sheet if needed): |
| |
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| <u> </u> |

(Failure to complete this page invalidates this application.)

Assurances

Should an award of funds for the MESA program be granted to the applicant in support of the activities proposed in this application, the authorized signatures on the application certify to USOE that they will:

- Supplement state MESA funds with additional resources (cash or in-kind) equal to 10% of the MESA grant award to supplement the services and activities in the MESA plan.
- Conduct educational activities funded by this project in compliance with Utah State Code r277-717.
- Provide services to targeted MESA students identified within the MESA program.
- Use of MESA funds must be directly related to MESA students and can not be used to supplant or replace other funding of any kind.
- Provide MESA services to identified students in the school or feeder system for which it was allocated. Funds may be used at the district level to provide support for the MESA program as a whole.
- Submit, in accordance with stated guidelines and deadlines, all program and evaluation reports required by USOE.
- District MESA Coordinator, Principals and Superintendent must be aware of the expectations of this plan and have committed their support.
- Retain records of the program for 6 years (2 funding cycles) and will allow access to these records for review and audit purposes.

| Signature of District MESA Coordinator | Date |
|--|------|
| Signature of Superintendent | Date |

| Number of Previous | Number of Additional | Total Number of Schools |
|-----------------------|----------------------|-------------------------|
| Eligible MESA Schools | MESA Schools | Requesting Funds this |
| Requesting Funds | Requesting | Cycle |
| | | |

(Failure to complete this page invalidates this application.)

Assurances

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- District MESA Coordinator, Principals and Superintendent must be aware of the expectations of this plan and have committed their support.
- Retain records of the program for 6 years (2 funding cycles) and will allow access to these records for review and audit purposes.

| Signature of Principal | Date |
|---------------------------------|------|
| | |
| Name of District/Charter School | |

Please make copies for additional Principal signatures.

| Step 2: Please descr | ibe, in detail, v | our propose | l MESA prog | ram. Give as | much detail as | | | | |
|-------------------------|--|---------------|-------------|--------------|----------------|--|--|--|--|
| possible in re | describe, in detail, your proposed MESA program. Give as much detaile in regards to how your program will stand out and help minority and feats achieve. (<i>In 500 words or less</i>) | | | | | | | | |
| students acm | ieve. (111 500 wc | orus or tess) | | | | | | | |
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| Step 3: | CI IL MITCA -L. | · · · /7 | | | | | | |
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| Summarize how the proposed program fits the MESA objectives. (In 300 words or less) | | | | | | | | |
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| Step 4: Describe in detail the proces | ss of how you will evaluate yo | ur own progress and how th |
|---------------------------------------|---|----------------------------|
| data will be used to help min | ss of how you will evaluate yo nority and female students. (<i>I</i> | n 300 words or less) |
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| Step 5 Describe your participation. | specific strategies (In 300 words or | s and how they v | vill be used to ir | ncrease MESA | |
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| Please Note: Data | requested is only | v for schools | applying for a grant. |
|--------------------|-------------------|---------------|-----------------------|
| i icasc Note. Data | requested is offi | | appiying for a grant. |

Step 6

Complete the following chart by adding specific numbers of how many minority and female teachers are a part of the science and math departments.

2008-2009 Academic School Year

| White/ Caucasian | | Hispanic | | A | sian | African American | | Pacific Islander | | American Indian/Alaska n Native | | Other/ Unknown | |
|---------------------|---|----------|---|---|------|---------------------|---|---------------------|---|---------------------------------------|---|-------------------|---|
| М | F | М | F | М | F | М | F | М | F | М | F | М | F |
| | | | | | | | | | | | | | |

Step 7

Complete the chart below showing the demographics of the student population.

2008-2009 Academic School Year

| White/ Caucasian | | Hispanic | | Asian | | African American | | Pacific Islander | | American Indian/ Alaskan Native | | Other/ Unknown | | |
|---------------------|---|----------|---|-------|---|---------------------|---|---------------------|---|--|---|-------------------|---|---|
| | М | F | М | F | М | F | М | F | М | F | М | F | М | F |
| | | | | | | | | | | | | | | |

Step 8

Complete the chart below by adding the number of students enrolled in Advanced Placement, Concurrent Enrollment, Honors and Gifted courses.

2008-2009 Academic School Year - Senior High

| White/ Caucasian | | Hisp | Hispanic | | sian | | ican rican | | ific nder | Ind Ala | erican lian/ skan tive | | her/ nown |
|---------------------|---|------|----------|---|------|---|---------------|---|--------------|------------|---------------------------------|---|--------------|
| М | F | М | F | M | F | М | F | М | F | М | F | М | F |
| | | | | | | | | | | | | | |

2008-2009 Academic School Year - Junior High

| White/ Caucasian | | Hispanic | | As | sian | | ican rican | | ific nder | Ind Alas | rican lian/ skan tive | | her/ nown |
|---------------------|---|----------|---|----|------|---|---------------|---|--------------|-------------|--------------------------------|---|--------------|
| М | F | М | F | М | F | М | F | М | F | М | F | М | F |
| | | | | | | | | | | | | | |

| | nite/ casian | His | panic | As | sian | Afri Amei | | | cific nder | American Indian/ Alaskan Native | | Other/ Unknown | |
|-------------|-----------------|------|----------|------|--------|-----------------|--------|-------|---------------|--|-----------|-------------------|----|
| М | F | М | F | М | F | М | F | М | F | М | F | М | F |
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Step 11

Please itemize your 2009-2010 projected budget for this process.

| Categories | MESA Funds | District Funds | Federal Sources | Other Sources |
|--|---------------|-------------------|--------------------|------------------|
| Total Funds Appropriated | \$ | \$ | \$ | \$ |
| Expenditures | \$ | \$ | \$ | \$ |
| Salaries for Instructors | \$ | \$ | \$ | \$ |
| Administrative Costs | \$ | \$ | \$ | \$ |
| Materials | \$ | \$ | \$ | \$ |
| Professional Development | \$ | \$ | \$ | \$ |
| Incentives to teachers: i.e., books, material | \$ | \$ | \$ | \$ |
| Food/Lodging/Meeting Room | \$ | \$ | \$ | \$ |
| Substitutes | \$ | \$ | \$ | \$ |
| Travel | \$ | \$ | \$ | \$ |
| University of Utah | \$ | \$ | \$ | \$ |
| Other | \$ | \$ | \$ | \$ |
| Total Requested | \$ | \$ | \$ | \$ |

Restate your Assurance (Describe how you will either get 10% funding or how you will find support in kind):